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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/292,191	04/15/1999	WILLIAM MEYER SMITH	AT9-98-355	3200

7590 08/30/2004

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EXAMINER	
WILLETT, STEPHAN F	

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER
	13

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

The time to respond will not be reset and a fax copy was sent to the representative.

Office Action Summary	Application No. 09/292,191	Applicant(s) SMITH ET AL.	
	Examiner Stephan F Willett	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2004*.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-9,11-18,20-27 and 29-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *2-9,11-18,20-27 and 29-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Title Change

1. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it must be submitted no later than the payment of the Issue Fee.

2. Pursuant to MPEP 606.01, the title has been change to read: --AN APPARATUS AND METHOD FOR SCHEDULING SERVICE OF NETWORK SERVICE REQUESTS BASED ON AVAILABLE NETWORK CAPACITY AND A PRESELECTED SUBFILE OR BASED ON TIME SLOTS THAT INCLUDE PORTIONS RESERVED FOR REAL TIME OR SCHEDULED REQUESTS AND PRIORITY REQUESTS--.

Examiner's Amendment

3. In claim 18, after the word "time slots and" delete "-12" and replace with ",".

4. In claim 27, after the word "said first portion includes a" delete "third portion".

Claim Rejections - 35 USC § 103

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4, 13, 22, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. with Patent Number 5,920,701 in view of Boyle with Patent Number 6,119,167.

8. Regarding claim(s) 4, 13, 22, 32, Miller teaches determining availability of resources, col. 4, lines 46-55 for network requests from a client as content server itself, or replication server, or scheduler to a content server as a server, col. 4, lines 35-40; col. 5, lines 3-13. Miller teaches allocating a scheduled time, col. 7, lines 54-56; col. 10, lines 54-57, to send a network request by the client or scheduler or replication server, col. 12, lines 24-29 for software and data, col. 5, lines 15-19. Miller teaches breaking a file into subfiles or data frames as "packets which together constitute a computer file", col. 5, lines 19-23. Miller teaches the invention in the above claim(s) except for explicitly teaching resending a requested subfile. In that Miller operates to transfer data over a network, the artisan would have looked to the computer network arts for details of implementing scheduling operations. In that art, Boyle, a related data distributing network teaches "notification objects delivered to this address are scheduled for delivery", col. 26, lines 14-15 in order to provide requested content. Boyle specifically teaches resending a packet, col. 23, lines 34-38 wherein a packet is part of a message or file. Further, Boyle suggests "an extended schedule", col. 24, line 38 to incorporate all equivalent types of scheduling. The

motivation to incorporate resending subfiles insures that network performance is increased. Thus, it would have been obvious to one of ordinary skill in the art to incorporate resending subfiles as taught in Boyle into the network scheduling system described in the Miller patent because Miller operates with timely transferring data and Boyle suggests that optimization can be obtained by specifically resending subfiles or packets. Therefore, by the above rational, the above claim(s) are rejected.

9. Claims 2-9, 11-18, 20-27, 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. with Patent Number 5,920,701 in view of Phaal with Patent Number 6,006,269.

10. Regarding claim(s) 4, 13, 22, 32, Miller teaches determining availability of resources, col. 4, lines 46-55 for network requests from a client as content server itself, or replication server, or scheduler to a content server as a server, col. 4, lines 35-40; col. 5, lines 3-13. Miller teaches allocating a scheduled time, col. 7, lines 54-56; col. 10, lines 54-57, to send a network request by the client or scheduler or replication server, col. 12, lines 24-29 for software and data, col. 5, lines 15-19. Miller teaches breaking a file into subfiles or data frames as "packets which together constitute a computer file", col. 5, lines 19-23. Miller teaches the invention in the above claim(s) except for explicitly teaching resending a request. In that Miller operates to transfer data over a network, the artisan would have looked to the computer network arts for details of implementing scheduling operations. In that art, Phaal, a related data distributing network teaches "if processing resources of the server are strained, the admission control system defers messages corresponding to new session to a later time", col. 4, lines 48-50 in order to provide requested content. Phaal specifically teaches resending data, col. 16, line 49. Further, Phaal

suggests "the motivation for multiple classes can vary", col. 13, line 43 to incorporate all equivalent types of real time priorities. The motivation to incorporate resending insures that network performance is increased. Thus, it would have been obvious to one of ordinary skill in the art to incorporate resending requests as taught in Phaal into the network scheduling system described in the Miller patent because Miller operates with timely transferring data and Phaal suggests that optimization can be obtained by specifically resending requests. Therefore, by the above rational, the above claim(s) are rejected.

11. Regarding claim(s) 2, 11, 20, 28-30, Miller teaches selecting and notification of a time slot, col. 12, lines 24-29, to said client, col. 6, lines 28-30, the client being the content source.

12. Regarding claim(s) 3, 12, 21, Miller teaches a plurality of time slots, col. 6, lines 15-18.

13. Regarding claim(s) 5-6, 14-15, 23-24, Miller teaches real time servicing of requests as emergency overage, highest priority or during current transmissions, col. 5, lines 57-58, col. 6, lines 52-56, col. 13, lines 27-30.

14. Regarding claim(s) 7, 16, 25, Miller teaches a portion of time reserved for certain requests, col. 7, lines 15-16, col. 8, lines 50-52.

15. Regarding claim(s) 31, Miller teaches Internet use, col. 5, line 1.

16. Regarding claim(s) 8-9, 17-18, 26-27, 33, Miller teaches determining availability of resources, col. 4, lines 46-55 for network requests from a client as content server itself, or replication server, or scheduler to a content server as a server, col. 4, lines 35-40; col. 5, lines 3-13. Miller teaches allocating a scheduled time, col. 7, lines 54-56; col. 10, lines 54-57, to send a network request by the client or scheduler or replication server, col. 12, lines 24-29 for software and data, col. 5, lines 15-19. Miller teaches the invention in the above claim(s) except for

explicitly teaching resending a request and real & priority portions of a time slot. In that Miller operates to transfer data over a network, the artisan would have looked to the computer network arts for details of implementing scheduling operations. In that art, Phaal, a related data distributing network teaches "if processing resources of the server are strained, the admission control system defers messages corresponding to new session to a later time", col. 4, lines 48-50 in order to provide requested content. Phaal specifically teaches resending data, col. 16, line 49. Phaal teaches a time slot portion for real time requests and a time slot portion for a scheduled request as "sessions in-progress" or "held open" slots, col. 5, lines 35-40, col. 13, lines 28-34; col. 14, lines 46-49. Phaal teaches priorities given to certain content similar to the priority given to real time content, col. 9, lines 17-28. Further, Phaal suggests "the motivation for multiple classes can vary", col. 13, line 43 to incorporate all equivalent types of real time priorities. The motivation to incorporate resending requests and real & priority time portions insures that network performance is increased Thus, it would have been obvious to one of ordinary skill in the art to incorporate resending requests and real & priority time portions as taught in Phaal into the network scheduling system described in the Miller patent because Miller operates with timely transferring data and Phaal suggests that optimization can be obtained by specifically resending requests and using real & priority time portions. Therefore, by the above rational, the above claim(s) are rejected.

Response to Amendment

17. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

18. Based on the new grounds for rejection the applicant's arguments are moot. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.

19. Applicant suggests "the Examiner has not presented prima facie case of obviousness", Paper No. 12, Page 12, lines 9-10 to combine. First, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the cited portions of the references and relevant portions of the reference. However, Phaal teaches "if processing resources of the server are strained, the admission control system defers messages corresponding to new session to a later time", col. 4, lines 48-50. Resending data or even subfiles as mentioned in Miller according to a schedule is suggested by Phaal. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

20. Applicant suggests "there is no language in the cited passage of breaking a file into subfiles", Paper No. 12, Page 12, lines 30-31. However, Miller teaches breaking a file into subfiles or data frames as "packets which together constitute a computer file", col. 5, lines 19-23 in legacy retransmission protocols such as TCP. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

21. Applicant suggests "Phaal does teach two classes of service ... however, there is no language in Phaal that a reserved time slot includes a portion reserved for servicing requests having priority", Paper No. 12, Page 15, lines 1-4. Surely, the classes can be scheduled with the priorities and the reliance on the references abstracts is misplaced. The references should not be

read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. The clear description in the reference is not obfuscated by the numerous other suggested usages of said description in the reference. In addition, implicitly, impliedly and inferentially, various schedule times with their associated priorities are taught and language identical or verbatim is not required in an obvious rejection. Note that reasonable "inferences", and "common sense" may be considered in formulating rejections for obviousness. Specifically, *In re Preda*, 401 F.2d 825, 159 USPQ 342, 344 (CCPA 1968) states "in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." Also, *In re Bozek*, 416 F.2d 738, 163 USPQ 545, 549 (CCPA 1969) states that obviousness may be concluded from "common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference". Additionally, see *In re Gauerke*, 24 CCPA 725, 86 F.2d 330, 31 USPQ 330, 333 (CCPA 1936), and *In re Libby*, 45 CCPA 944, 255 F.2d 412, 118 USPQ 94, 96 (CCPA 1958), and *In re Jacoby*, 309 F.2d 738, 125 USPQ 317, 319 (CCPA 1962), and *In re Wiggins*, 488 F.2d 538, 543, 1979 USPQ 421, 424 (CCPA 1973). Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. A close review of the references is suggested. A close review of the Sneeringer reference with Patent Number 6,618,709 is suggested. The other references cited teach numerous other ways to perform future scheduling, thus a close review of them is suggested.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (703) 305-4003. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

24. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw

June 2, 2004

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER